

# 1.0 PURPOSE AND NEED

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## 1.1 INTRODUCTION

### 1.1.1. Description and Location

Warren E & P, Inc. (Warren), Double Eagle Petroleum Company (Double Eagle), and Anadarko E&P Company (AEPC), collectively referred to as the Companies, have notified the Bureau of Land Management (BLM), Rawlins Field Office (RFO), that they propose to explore for and potentially develop coal bed natural gas (CBNG) resources in the Doty Mountain area (Project Area). The Project Area lies within the Atlantic Rim Environmental Impact Statement (EIS) study area in south-central Wyoming ([Figure 1-1](#)). The Project Area is located within the administrative boundary of the RFO in T17N R91W within Carbon County, Wyoming, and is one of nine areas or well pods that make up the Atlantic Rim Interim Drilling Project. This proposal is a part of interim drilling activity that BLM may allow while an EIS is being prepared for the Atlantic Rim Natural Gas Project.

The Doty Mountain interim development project consists of constructing, drilling, completing, testing, operating, and reclaiming 24 exploratory wells and two deep injection wells to dispose of produced water, located on both private and federal leases. The proposed project also would include related access roads, utilities, flowlines, a market access line, production facilities, and a compressor station. The life of the project is estimated to be 10 to 20 years.

Of the 24 proposed well locations, 16 wells would be located on surface ownership lands administered by the RFO and would develop federal minerals. The remaining proposed wells (eight) would develop fee minerals on fee surface. One proposed deep injection well would be located on lands administered by RFO. The compressor station and one proposed deep injection well would be located on fee lands.

The Project Area, which encompasses approximately 1,920 acres, is located about 25 miles southwest of Rawlins, Wyoming, near the intersection of Wyoming State Highway (WY) 789 and Carbon County Road 608 (Wild Cow Road). A checkerboard land ownership pattern of federal and private lands is characteristic of the area. The Project Area is within the Upper Colorado River Basin.

**Figure 1-1 Location Map**

## **1.2 PURPOSE OF AND NEED FOR ACTION**

### **1.2.1. Purpose and Need for the Proposed Project**

The purpose of the Companies' proposal is to search for and test certain geologic formations for the presence of commercial quantities of natural gas. The proposed project would allow the Companies to evaluate through exploration and production whether larger-scale development is feasible. The primary objective of the exploration project is to evaluate the following in support of the larger Atlantic Rim Natural Gas Project EIS (Atlantic Rim EIS):

- Productivity of and reserves within the coals;
- Economics of drilling and completion techniques;
- Feasibility of dewatering the coals; and
- Depths or pressure windows that may be preferred as the target for economic gas production.

Exploration and development of federal oil and gas leases by private industry is an integral part of the BLM's oil and gas leasing program. Statutory authority for BLM's oil and gas program is derived from the Mineral Leasing Act of 1920, as amended; the Mining and Minerals Policy Act of 1970; the Federal Land Policy and Management Act of 1976; the National Materials and Minerals Policy, Research and Development Act of 1980; and the Federal On-shore Oil and Gas Leasing Reform Act of 1987.

The proposed development would exercise the leaseholders' existing rights within the Project Area to drill for, extract, remove, and market gas products. National mineral leasing policies recognize the statutory right of leaseholders to develop federal mineral resources to meet continuing national needs and economic demands so long as natural resource values and uses are sustained. Also included is the right of the leaseholders within the Project Area to build and maintain necessary improvements, for drilling, producing, and marketing the natural gas, in accordance with the appropriate authority.

Natural gas is an integral part of the U.S. energy future because of its availability, the presence of an existing infrastructure for market delivery, and the environmental advantages of clean-burning natural gas as compared with other fuels. In addition, development of abundant domestic reserves of natural gas would reduce the country's dependence on foreign sources of energy and maintain an adequate and stable supply of fuel for economic well-being, industrial production, power generation, and national security. The environmental advantage of natural gas combustion versus other conventional fuels is emphasized in the Clean Air Act Amendments of 1990.

### **1.2.2. Environmental Analysis Process**

This environmental assessment (EA) documents the environmental analysis process BLM uses to make decisions in accordance with the National Environmental Policy Act (NEPA). This document provides the decision-makers with information needed to make a decision that is fully informed and that is based on factors relevant to the proposal. The decisions to

be made by BLM include which alternative to adopt, and whether the action adopted would be significant under NEPA. This EA also documents the analysis conducted on the proposal and alternatives and identifies environmental effects and mitigation measures. Finally, this document provides a vehicle for public review and comment on the proposal, the environmental analysis, and conclusions about the relevant issues.

This EA has been prepared to evaluate and disclose the potential environmental impacts associated with this project. The proposed exploration project would affect BLM lands managed by the RFO.

Factors considered during the environmental analysis for the exploratory project include the following:

- A determination of whether the proposal and alternatives conform to BLM policies, regulations, and the direction approved in the Resource Management Plan (RMP).
- A determination of whether the proposal and alternatives conform to policies and regulations of other agencies that are likely to be associated with the project.
- A determination of well pad locations, access roads, pipelines, and production facilities that best meet other resource management objectives and minimize impacts to surface resources while honoring the lease rights within the Project Area.
- A determination of impacts on the human environment that could result from the project and alternatives, and development of mitigation measures necessary to avoid or minimize these impacts.

## **1.3 RELATIONSHIP TO POLICIES, PLANS, AND PROGRAMS**

The EA is prepared in accordance with NEPA and complies with all applicable regulations and laws passed subsequent to the act. This EA assesses the environmental impacts of the project and no action alternative and guides the decision-making process.

### **1.3.1. Conformance with Great Divide Resource Area RMP**

In accordance with Title 43 Code of Federal Regulations (CFR) Part 1610.5, the proposed project has been reviewed and conforms to the Great Divide RMP, approved on November 8, 1990.

The BLM's Great Divide RMP and Record of Decision (ROD) (BLM 1987, 1988a, 1990) direct management of BLM-administered lands within the Project Area. Management of oil and gas resources, as stated in the RMP, provides for leasing, exploration, and development of oil and gas while protecting other resource values. According to the RMP, all public lands in the resource area are suitable for leasing and development of oil and gas, subject to certain

stipulations on leases and site-specific conditions of approval (COAs) attached to applications for permits to drill (APDs).

The project is located outside areas where surface-disturbing activities would be restricted and intensively managed to maintain important resource values, such as the Baggs Elk Crucial Winter Range or areas of critical environmental concern (ACECs). All proposed roads, flowlines, and the delivery pipeline are located outside avoidance areas for utility and transportation systems.

### **1.3.2. Conformance with Interim Drilling Guidelines**

The Proposed Action has been developed under the guidelines provided in the Interim Drilling Policy – “Development Authorized Concurrent with EIS Preparation for the Atlantic Rim Coalbed Methane Project” ([Appendix A](#)).

### **1.3.3. Relationship to Other Plans and Documents**

The proposed project conforms with the State of Wyoming Land Use Plan (Wyoming State Land Use Commission 1979) and the Carbon County Land Use Plan (Pederson Planning Consultants 1997, 1998) and would comply with all relevant federal, state, and local laws and regulations. Development of this project would not affect attainment of the Wyoming Standards for Healthy Rangelands, originally produced in August 1977 then updated May 9, 2003, (BLM 2003a) or the July 1998 Wyoming Fire Management Implementation Plan.

The BLM is required to consult with the Wyoming State Historic Preservation Office (SHPO) and others, as necessary, regarding potential impacts of the proposed undertaking upon historic properties. This consultation is required as part of the process under Section 106 of the National Historic Preservation Act of 1966, as amended. The project lies within the general area that contains the historic Rawlins-Baggs Stage Road, that is eligible for inclusion in the National Register of Historic Places (NRHP), and prehistoric camps are evident (Hatcher 2003a).

### **1.3.4. Issues and Concerns**

Environmental and social issues and management concerns associated with the proposed project are identified as follows:

#### **Surface Water and Groundwater Resources**

1. The proposed project could affect the quality of surface water in the Project Area and surrounding areas.
2. The proposed project could affect groundwater resources in the Project Area and surrounding areas.

### **Rangelands and Livestock Grazing**

1. Watering facilities that are well planned could be used to improve distribution and timing of use by livestock, which would lead to better conditions in upland and riparian areas.
2. Livestock watering facilities should be contained and shut off when not in use.

### **Wildlife Resources**

1. Wildlife habitats and populations within the Project Area and adjacent lands, primarily nesting areas, strutting grounds, and winter sites for greater sage grouse and crucial winter range for big game, may be affected by surface-disturbing activities, human presence, noise from the compressor station, or traffic.
2. The Baggs crucial winter range for elk, located just east of the Project Area, could be remotely affected by the proposed project.

### **Soil Resources**

1. Soil resources in the Project Area and surrounding areas could be affected by the proposed project.
2. Disturbed areas associated with construction activities should be reclaimed.

### **Other Resources and Uses**

1. The proposed project could affect the historic and cultural values that are currently unrecorded.
2. The proposed project (especially generators and the compressor station) could affect air quality or noise levels in the Project Area or surrounding areas.
3. Vegetation resources in the Project Area and surrounding areas could be affected by surface-disturbing activities. Invasive species or noxious weeds could increase in the Project Area.
4. The cumulative effects on all resources and uses should be addressed.

### **Monitoring**

1. The measurements needed and methodology for monitoring surveys should be established in consultation with BLM and other affected stakeholders.
2. Monitoring requirements that would measure effects on groundwater resources should be established.